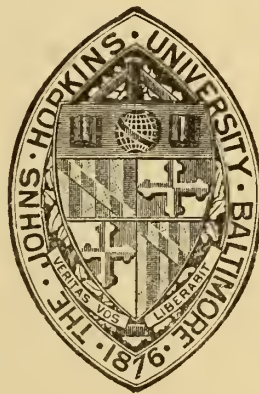


THE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND

CONFERRING OF DEGREES

AT THE CLOSE OF THE SEVENTY-EIGHTH ACADEMIC YEAR

JUNE 8, 1954



GILMAN HALL TERRACE

AT TEN A. M.

ORDER OF PROCESSION

CHIEF MARSHAL

HENRY T. ROWELL

Divisions

The President of the University,
the Chaplain, Honored Guests,
the Trustees

The Faculty

The Graduates

Marshals

FRITZ MACHLUP

HOWARD E. COOPER

CARL F. CHRIST

WALTER C. BOYER

HANS W. GATZKE

HAROLD E. HOELSCHER

WILLIS C. GORE

SIDNEY DAVIDSON

PAUL HESSEMER

ACHESON J. DUNCAN

MARGARET MERRELL

GEORGE W. DANA

C. GROVE HAINES

CHARLES D. SWARTZ

USHERS

The ushers are members of Kappa Mu Chapter of Alpha Pi Omega,
national service fraternity

ORGANIST

JOHN H. ELTERMANN

The audience is requested to stand as the academic procession moves into the area
and to remain standing until after the Invocation and the
singing of the National Anthem

ORDER OF EXERCISES

I

PROCESSIONAL

“Festival March” by E. Gigout

II

INVOCATION

REVEREND GEORGE A. TAYLOR
St. David's Church

III

THE NATIONAL ANTHEM

IV

ADDRESS

“Two Quests of Man”
JOSEPH HENRY WILLITS

V

CONFERRING OF HONORARY DEGREES

ALEXANDER FORBES	— presented by Dean BARD
WINFORD HENRY SMITH	— presented by Professor WOODS

VI

CONFERRING OF DEGREES

Bachelors of Arts	— presented by Dean COX
Bachelors of Engineering	— presented by Dean ROY
Bachelors of Engineering Science	
Masters of Science in Engineering	
Doctors of Engineering	
Bachelors of Science in Business	— presented by Dean ROY
Bachelors of Science	— presented by Dean MUMMA
Bachelors of Science in Engineering	
Bachelors of Science in Nursing	
Masters of Education	
Masters of Science in Hygiene	— presented by Professor STEBBINS
Doctors of Science in Hygiene	
Masters of Public Health	
Doctors of Public Health	
Doctors of Medicine	— presented by Dean BARD
Masters of Arts, School of Advanced International Studies	— presented by Dean THAYER
Doctors of Philosophy, School of Advanced International Studies	
Masters of Arts	— presented by Professor PAINTER
Doctors of Philosophy	

VII

BENEDICTION

VIII

RECESSIONAL

“Grand Course” by J. Jongen

The audience is requested to remain standing after the Benediction
until the graduates have left the area.

CANDIDATES FOR DEGREES

BACHELORS OF ARTS

- EARL ROBERT ALBAN, JR., of Baltimore, Md.
* HENRI ALPHANDERY, of Alexandria, Egypt
HERBERT SANFORD ALTERMAN, of Passaic, N. J.
GEORGE BABICH, of Chicago, Ill.
* NICHOLAS ROBERT BACHUR, of Baltimore, Md.
* JOHN EDWARD BASINSKI, of Pasadena, Calif.
MAURICE HOLMES BATES, of Baltimore, Md.
JOHN RICHARD BEEVER, of Baltimore, Md.
CHARLES NICHOLAS BELER, of Baltimore, Md.
JOSEPH BILITZ, of Elizabeth, N. J.
ALAN GRANT BIRTCH, of LaPorte, Ind.
JOHN WILLIAMS BOYNTON, JR., of Baltimore, Md.
MARTIN LIVINGSTON BRONSTEIN, of Elizabeth, N. J.
* JOHN McLAUREN BURNS, of Baltimore, Md.
BRADFORD ARTHUR CAFFREY, of New Haven, Conn.
WILLIAM DOYLE CALLEY, of Berwick, Pa.
BRYAN JAMES CARDER, JR., of Berwin, Ill.
BENEDICT SALVATORE CATERINICCHIO, of Elizabeth, N. J.
FRANK CHARLES CEGELSKI, of St. James, N. Y.
MATTHEW JOHN CERNY, JR., of Williston Park, N. Y.
GARY LEE CLATTERBUCK, of Baltimore, Md.
RICHARD HAROLD CLUM, of Chappaqua, N. Y.
ROBERT TYLER CORNEY, of South Orange, N. J.
JACK ALAN DAVIS, of Miami Beach, Fla.
VINCENT ROBERT DEANGELIS, of Lindenhurst, N. Y.
* BERNHARD DEKLAU, of Tallinn, Estonia
LOUIS ANTHONY DE MONTE, of Baltimore, Md.
DENNIS RICHARDS DERBY, of Gowanda, N. Y.
HENRY JOSEPH DOHERTY, JR., of Trenton, N. J.
GERHART ANTON DUDA, of New Preston, Conn.
* ALAN NEIL EPSTEIN, of Palisades Park, N. J.
ROBERT MIDDLETON EVANS, of Merchantville, N. J.
STANLEY NORTON FAROVITCH, of New York, N. Y.
PHILIP JOSEPH FERRIS, of New Brunswick, N. J.
ANGELO FORTUNATO, of Hillside, N. J.
EDWARD JAMES FREEMAN, of Manhasset, L. I., N. Y.
SEBASTIAN JOHN GALLO, of Hartford, Conn.
DAVID ENRIQUE GARCÍA-TRÍAS, of San Juan, Puerto Rico
* BARRETT GOLDSTEIN, of Baltimore, Md.
BERTRAM FISCHER GOODHART, of Chicago, Ill.
* PETER LeBRETON GRAY, of Bel Air, Md.
CHARLES MAXSON GREENLAND, of Baltimore, Md.
* VINCENT RAUTH GROH, of Hagerstown, Md.
JOSHUA MEREDITH DRYDEN HALL, JR., of Baltimore, Md.
JAMES PAUL HAMILTON, of East Brady, Pa.
GEORGE WHITE HARDMAN, of Garden City, N. Y.
ALBERT FRANK HECK, of Baltimore, Md.
* STEPHEN HENRY HESS, of Baltimore, Md.
DAVID WILLIAM HINSHAW, of Frederick, Md.
EDWIN ALAN HIRSCHMANN, of Baltimore, Md.
RODERICK LEWIS HOHL, of Scarsdale, N. Y.
* CHARLES A. PORTER HOPKINS, of Baltimore, Md.
MACK HOPKINS, JR., of Alliance, Ohio
GERALD CHARLES HORNICK, of Johnstown, Pa.
* JED LEE HOWARD, of North Bellmore, N. Y.
* BURTON SIMSON HUTMAN, of Washington, D. C.
ROGER BOWMAN INGHAM, of Charlestown, Ind.
DAVID FREELAND JENNINGS, of Lima, Ohio
* ANDREW JOHN, JR., of Baltimore, Md.
ROBERT MATHIS JOHNSON, of Cumberland, Md.
JOHN EDWARD JOHNSTON, JR., of Baltimore, Md.
* CONRAD GEORGE JULIAN, of Wildwood, N. J.
* MARVIN KAHN, of Baltimore, Md.
DANIEL LEE KAPLAN, of Baltimore, Md.
* JOSEPH WARD KERRIGAN, of Emmitsburg, Md.
FREDERICK WILLIAM KUETHE, JR., of Glen Burnie, Md.
* RICHARD ALEXANDER LANE, of Baltimore, Md.
MATHEW HUNG MUN LEE, of Wahiawa, Territory of Hawaii
CHARLES JOHN LEWIS, of Baltimore, Md.
LARRY MARVIN LIEB, of Pottstown, Pa.
ALAN BENNETT LISOOK, of Trenton, N. J.
DANIEL LITT, of Baltimore, Md.
FRANK BLAZE LONEGRO, of Baltimore, Md.
RALPH MARVEL LORD, of Dover, Del.
ROBERT BERNARD LUCAS, of Philipsburg, Pa.
KENNETH LUXENBERG, of Washington, D. C.
DONALD FREDERICK MANGER, of Baltimore, Md.
* DAVID BOWEN McCANDLISH, of Port Clinton, Ohio
* WILLIAM ROBERT McCARTIN, of Baltimore, Md.
HOWARD BYER McELWAIN, JR., of Baltimore, Md.
PETER MONYAK, of Baltimore, Md.
IRWIN BERNARD MOORE, of Baltimore, Md.
EDWIN STANLEY MRUK, of West Warwick, R. I.
ROBERT NAJAR, of Baltimore, Md.
HERBERT J. NICKEL, of Baltimore, Md.

* Graduating with departmental honors.

- HERBERT NOBLE, JR., of Boston, Mass.
 JOHN STURGES O'CONNOR, of Madison, N. J.
 SAMUEL OPPENHEIM, of Baltimore, Md.
 JOHN LOUIS PARADISO, of Takoma Park, Md.
 JACK HOUGEN PETAJAN, of Waukesha, Wis.
 * DONALD PAUL PEYSER, of Maplewood, N. J.
 * WILLIAM ARTHUR PIZANTE, of Chicago Heights, Ill.
 MAURICE A. POMERANTZ, of Baltimore, Md.
 SEYMOUR FREDERICK RAPHAEL, of Baltimore, Md.
 RICHARD CROMWELL RICE, of Ruxton, Md.
 RALPH M. RICHART, of Hollywood, Fla.
 RICHARD WILLIAM ROBERTS, of Manhasset, L. I., N. Y.
 WALTER MCCARL ROBERTS, JR., of Glen Arm, Md.
 * ZELIG E. ROBINSON, of Baltimore, Md.
 * LEONARD SIDNEY RODBERG, of Baltimore, Md.
 GERALD MARTIN ROOD, of Hillside, N. J.
 JOHN HALL ROUSE, JR., of Baltimore, Md.
 PHILIP KING RUSSELL, of Constantia, N. Y.
 ARIEH I. SACHS, of Tel Aviv, Israel
 VINCENT JOSEPH SANTANGELO, of Baltimore, Md.
 MORRIS LEWIS SCHERR, of Baltimore, Md.
 HENRY JOHN FRED SCHROEDER, of New York, N. Y.
 GILBERT FITZGERALD SELLARS, of Baltimore, Md.
 IVAN R. SHAPIRO, of Baltimore, Md.
 NORTON DAVID SHARGEL, of Baltimore, Md.
 ROBERT BENSON SHAWN, of Longmeadow, Mass.
 HERBERT WARREN SHEPARD, of Baltimore, Md.
 * EDWARD NICHOLAS SHIPLEY, of Baltimore, Md.
 NORMAN LLEWELYN SHIPLEY, of Baltimore, Md.
 JACOB H. SILVERMAN, of New York, N. Y.
 JOHN OWEN SIMON, of Emerson, N. J.
 * RICHARD ARTHUR SLAVEN, of Pikesville, Md.
 ALISON VERA SMITH, of New York, N. Y.
 WENDELL ATKINS SMITH, of Erlton, N. J.
 JOSEPH SEDWICK SOLLERS, JR., of Baltimore, Md.
 O. DAVID SOLOMON, of Uniontown, Pa.
 WILLIAM JOSEPH DET. SOMERVILLE, JR., of Stevenson, Md.
 CLAYTON SILAS SPEAR, JR., of Baltimore, Md.
 RONALD STAHL, of New York, N. Y.
 * KLAUS ARNO KURT STEIN, of Stuttgart, Germany
 FREDERICK STEINMANN, of Baltimore, Md.
 ZENAS MONROE SYKES, JR., of Baltimore, Md.
 WILLIAM BURKS TERRY, of Baltimore, Md.
 CLARK EUGENE THOMPSON, of Cowiche, Wash.
 PETER HAZZARD TROTTER, of Yonkers, N. Y.
 ROY TERUYUKI UYEDA, of Honolulu, Territory of Hawaii
 CECIL WOODS VEST, JR., of Baltimore, Md.
 ELMORE JOHN WALLIN, of Aberdeen, Wash.
 LAWRENCE RADCLIFFE WALZ, of Greenwich, Conn.
 ALBERT HIGHERT WARD, JR., of Stormfield Redding, Conn.
 * PETER CARTER WARREN, of Plainfield, N. J.
 * ARTHUR IRWIN WASKOW, of Baltimore, Md.
 JOHN WARREN WEAVER, of Baltimore, Md.
 RAYMOND MORTON WEINBERG, of Baltimore, Md.
 ROBIN SLANE WEIR, of Delray Beach, Fla.
 * JOSEPH RONALD WINTERS, of Timonium, Md.
 * CECIL HILBURN WOMBLE, of Birmingham, Ala.
 EDWARD JAMES WRIGHT, JR., of Cresskill, N. J.
 STEVENSON YOST, of Ridgewood, N. J.

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GRADUATING WITH GENERAL HONORS

MAURICE HOLMES BATES
 ALAN GRANT BIRTCH
 JOHN McLAUREN BURNS
 BERNHARD DEKLAU
 ALAN NEIL EPSTEIN
 STANLEY NORTON FAROVITCH
 VINCENT RAUTH GROH
 GEORGE WHITE HARDMAN
 STEPHEN HENRY HESS
 JED LEE HOWARD
 CONRAD GEORGE JULIAN

MARVIN KAHN
 JOSEPH WARD KERRIGAN
 LARRY MARVIN LIEB
 DAVID BOWEN McCANDLISH
 ZELIG E. ROBINSON
 ARIEH I. SACHS
 EDWARD NICHOLAS SHIPLEY
 RICHARD ARTHUR SLAVEN
 KLAUS ARNO KURT STEIN
 ARTHUR IRWIN WASKOW
 CECIL HILBURN WOMBLE

* Graduating with departmental honors.

BACHELORS OF ENGINEERING

- JOHN GORDON ALLEN, of Baltimore, Md.
DONALD EUGENE ANDREWS, of Cambridge, Md.
DONALD WHITEFORD ANTOS, of Baltimore, Md.
CHARLES EUGENE BELL, of Baltimore, Md.
CHARLES WILLARD BLADES, of Denton, Md.
RICHARD CHARLES BOHNET, of Baltimore, Md.
RAY WARREN BRESLAU, of Baltimore, Md.
ANTHONY BERNARD CAMPITELLI, of Baltimore, Md.
MARK CHANDLER, of Baltimore, Md.
MELVIN WALTER CHARCHUT, of Baltimore, Md.
HARRY MARVIN CRONER, of Baltimore, Md.
DONALD SELBY CROUCH, of Stevensville, Md.
DONALD EARL DALGLEISH, of Baltimore, Md.
JONAS DEDINAS, of Baltimore, Md.
SHERMAN HAMBLETON DEVEAS, Jr., of Lutherville, Md.
LEIGHTON HUGH DEVLIN, of Washington, D. C.
BARRY LEE DICKINSON, of Cabin John, Md.
JOSEPH BRUN DIGIORGIO, of Towson, Md.
WADE EARL DILL, of Annapolis, Md.
JAMES MERRILL DOUGLAS, of Baltimore, Md.
ELMO TIGNOR DOUGLASS, of Baltimore, Md.
RICHARD LAWRENCE EBY, of Baltimore, Md.
GEORGE DWIGHT ENGLAND, of Baltimore, Md.
HOWARD STEPTOE FITZHUGH, II, of Baltimore, Md.
SAMUEL ROBERT FLEISHMAN, of Baltimore, Md.
JOSEPH ALBERT FRESE, of Baltimore, Md.
ELWOOD HOLMES GIFT, of Luke, Md.
JOHN SLAGLE GITR, of Baltimore, Md.
ARTHUR DAVID GOODWIN, of Baltimore, Md.
PAUL EVANS GORMAN, Jr., of Baltimore, Md.
WILLIAM HAGIS, of Baltimore, Md.
ALLAN DAVID HARDING, of Baltimore, Md.
THOMAS EMIL HARRISON, of Baltimore, Md.
WILLIAM TILGHMAN HEMSLEY, of Baltimore, Md.
FREDERICK FOWLER HILTZ, of Baltimore, Md.
JOSEPH CHARLES HLAVIN, Jr., of Baltimore, Md.
RICHARD SHELTON HOLLAND, of Catonsville, Md.
JOHN GARDNER HUBBARD, of Baltimore, Md.
JAMES PEYTON HUTCHINS, of Sharptown, Md.
RONALD ELIAS KAPLAN, of Clinton, Md.
GEORGE ARTHUR KEIGLER, of Baltimore, Md.
ROBERT WATTERSON KELLY, Jr., of Baltimore, Md.
IRWIN STUART KELSON, of Highland Park, N. J.
EDWARD RODGER KENNEDY, of Silver Spring, Md.
LOUIS EARL KIBLER, Jr., of Baltimore, Md.
JULIAN PEARRE KING, Jr., of Germantown, Md.
GEORGE GUY KNICKERBOCKER, of Baltimore, Md.
ROBERT LOUIS KONDNER, of Baltimore, Md.
RAYMOND JOHN KRIZEK, of Baltimore, Md.
ALBERT KETRON LANE, Jr., of Baltimore, Md.
WILLIAM GILTZ LAYNOR, Jr., of Baltimore, Md.
ALVIN JAY LEVY, of Baltimore, Md.
HIRSCH ISRAEL MANDELBERG, of Baltimore, Md.
RONALD LEWIS MANN, of Baltimore, Md.
BRUCE CONRAD MARTIN, of Baltimore, Md.
VERNON BRUCE MAY, of Baltimore, Md.
MARVIN DAVID MAYER, of Baltimore, Md.
JOSEPH FRANCIS MCADAM, III, of Baltimore, Md.
CLARENCE HERBERT MCCULLOUGH, of Baltimore, Md.
RICHARD HILLIARD MEDINA, of Baltimore, Md.
CASIMIR MILEWSKI, of Baltimore, Md.
HENRY TYRUS MILLER, of Baltimore, Md.
VERNON WALTER MILLER, of Baltimore, Md.
THEODORE SIDNEY MOISE, III, of Chevy Chase, Md.
HARRY ELLSWORTH MONTGOMERY, of Hagerstown, Md.
RICHARD LEE MORGAN, of Frederick, Md.
CHAPLAIN WILLIS MORRISON, of Baltimore, Md.
VINCENT OLIVER MOWERY, of Baltimore, Md.
KASEM NANDHAKIJ, of Bangkok, Thailand
JOHN JOSEPH NELLIGAN, of Baltimore, Md.
EDWARD JOHN PANUSKA, of Baltimore, Md.
NICHOLAS MICHAEL PAPANICOLAOU, of Baltimore, Md.
CALVIN CLYDE PATTERSON, of Baltimore, Md.
EDWARD CHARLES PERKO, of Baltimore, Md.
LEONARD THOMAS PHILLIPS, of Baltimore, Md.
JOHN FRANK PLATT, Jr., of Baltimore, Md.
ERVIN RUSSELL PRITCHETT, of Baltimore, Md.
JOHN PAUL RAYCOB, of Baltimore, Md.
LAWRENCE DAVID REIMER, Jr., of Baltimore, Md.
MELVIN WILLIAM RICHTER, of Baltimore, Md.
LOUIS MARTIN ROBINSON, of Baltimore, Md.
THOMAS GEORGE ROLSTON, of Baltimore, Md.
JOHN EDWARD SCHAEFER, of Baltimore, Md.
DENNIS ALOYSIUS SCULLY, of Baltimore, Md.
MAURICE DONALD SEELIG, of Ocean City, Md.
DONALD CARROLL SEYBOTH, of Baltimore, Md.
JOHN ALAN SMITH, of Baltimore, Md.
FREDERICK STALFORT STEINBACH, Jr., of Baltimore, Md.
HERBERT ANTHONY STIERSTORFER, of Baltimore, Md.
WILLIAM THOMAS STOCKHAUSEN, of Baltimore, Md.
RONALD DENTON STOFFER, of Hagerstown, Md.
ALAN JOSEPH STREB, of Baltimore, Md.
SALVATORE PHILIP SUTERA, of Baltimore, Md.
ARTHUR MONTGOMERY THOMAS, Jr., of Wittman, Md.
FRANK SELIM MOUSA THOMAS, of Baghdad, Iraq
GEORGE MCKINLEY TUCKER, Jr., of Baltimore, Md.
GUILFRED LEONARD VOGT, of Baltimore, Md.
GEORGE KEMP VRONCH, of Baltimore, Md.
WILLIAM PETER WALATKUS, of Baltimore, Md.
SAMUEL TAYLOR WALKER, Jr., of Frostburg, Md.
JOHN STANISLAUS WALTER, of Baltimore, Md.
JOHN LAWRENCE WARTHEN, of Baltimore, Md.

RICHARD KARL WEBER, of Baltimore, Md.
ROBERT DANIEL WELCH, of Quincy, Mass.
JOHN THOMAS WELLENER, of Baltimore, Md.

RICHARD LOUIS WERNECKE, of Baltimore, Md.
LOY ALFRED WILKINSON, of Baltimore, Md.

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GRADUATING WITH HONORS

JOSEPH BRUN DiGIORGIO
JAMES PEYTON HUTCHINS
HIRSCH ISRAEL MANDELBERG

VINCENT OLIVER MOWERY
DONALD CARROLL SEYBOTH
SALVATORE PHILIP SUTERA

BACHELORS OF ENGINEERING SCIENCE

RICHARD LLOYD ALVERSON, of Baltimore, Md.
GEORGE WALTER CRAMER, JR., of Baltimore, Md.
DOMINIC GARDINER BOWLING EDELEN, of Upper Marlboro,
Md.
ROGER ARMSTRONG EVANS, of Great Neck, N. Y.
THOMAS EDWARD GIBLIN, of Baltimore, Md.

DALE ROYSTON KELLENBERGER, of Glen Burnie, Md.
WILLIAM LOUIE, of Easton, Md.
HUGH YOUNG RIENHOFF, of Baltimore, Md.
JOHN MILTON TWIGG, JR., of Baltimore, Md.
HARRY E. WALMER, of Steelton, Pa.

(10)

GRADUATING WITH HONORS

RICHARD LLOYD ALVERSON

DOMINIC GARDINER BOWLING EDELEN

MASTERS OF SCIENCE IN ENGINEERING

WITH TITLES OF ESSAYS

IRVING THOMAS BASIL, of Baltimore, Md., B. E. The Johns
Hopkins University, 1950. Electrical Engineering.

A Comparative Study of the Various Operational
Methods Used in the Transient Analysis of Linear
Systems.

THEODORE ENGELBERT BRENNER, of Atlantic Highlands, N.
J., B. C. E. Manhattan College, 1951. Sanitary Engi-
neering.

The Effect of Oligodynamic Silver on Algae.

ROBERT DEWALD BROOKS, of Ballston Lake, N. Y., B. E. The
Johns Hopkins University, 1948. Chemical Engineering.

The Viscosity of Steam at Elevated Temperatures.

ANTHONY THOMAS CAROZZA, II, of Baltimore, Md., B. S.
C. E. Virginia Military Institute, 1951. Civil Engi-
neering.

An Analytical Evaluation of the Krey Method.

JACK DOMINITZ, of Brooklyn, N. Y., B. S. College of the
City of New York, 1951. Civil Engineering.

The Use of Atmospheric Data in the Evaluation of
Evapotranspiration.

HONORATO SINGCO ECHAVEZ, of Baltimore, Md., B. S. in
Mining Eng. University of Kansas, 1949; B. S. (Eng.),
1950. Sanitary Engineering.

Studies of Tolerance of Fresh Water Fish to Strong
Acids and to Acid Mine Water Wastes.

THOMAS SPICER EICHELBERGER, of Allentown, Pa., B. E.
(Electrical) The Johns Hopkins University, 1943; B. E.
(Mechanical), 1947. Mechanical Engineering.

A Study of the Longitudinal Strains Induced in a Bar
Subjected to Axial Impact.

CHARLES DENHARD FLAGLE, of Baltimore, Md., B. E. The
Johns Hopkins University, 1940. Industrial Engineering.

Probability Based Tolerances in Forecasting and
Planning.

EDMUND M. GLASER, of New York, B. E. E. Cooper Union,
1949. Electrical Engineering.

Detection of Radio Signals of Unknown Characteristics.

PAUL ALTOM JENNINGS, of Baltimore, Md., E. Met. Colo-
rado School of Mines, 1934. Mechanical Engineering.

The Effect of Grain Size on the Creep Characteristics
of Low-Carbon Austenitic Stainless Steel.

- LESTER LAWRENCE JONES, JR., of Oradell, N. J., B. E. The Johns Hopkins University, 1952. Mechanical Engineering.
Approximative Formulae in the Theory of Thermal Regenerators.
- ARTHUR B. KAHN, of The Bronx, N. Y., B. S. College of the City of New York, 1951. Civil Engineering.
A New Method for Spectrum Analysis Based upon an "Averaging Function."
- ROBERT LAWRENCE KOFFLER, of New York, N. Y., B. Ch. E. City College of the City of New York, 1942. Chemical Engineering.
A Study of Two-Phase Flow Pressure Drop for Steam Condensing inside a Horizontal Tube.
- KONSTANTINE L. KOLLAR, of Washington, D. C., B. S. College of the City of New York, 1939. Sanitary Engineering.
Effects of Upward Fluid Flow on Filter Media.
- ROBERT L. KONIGSBERG, of Baltimore, Md., B. E. Cooper Union, 1942; M. E. New York University, 1948. Electrical Engineering.
Theory of the Electronically Tuned Transmission Line.
- EDWARD THOMAS KUSTERER, of Baltimore, Md., B. E. The Johns Hopkins University, 1949. Mechanical Engineering.
Orthogonally Stiffened Circular Plate with Clamped Edge Subjected to Uniform Lateral Pressure.
- JORGE ALBERTO LORE B., of Panama, Republic of Panama, B. S. University of Panama, 1951. Sanitary Engineering.
An Investigation of Foam Breaking Agents Applicable to Aeration Tanks.
- JOHN LEASK LUMLEY, of Baltimore, Md., A. B. Harvard University, 1952. Mechanical Engineering.
Probability from Finite Samples: A Convergence Problem.
- ROBERT ROGERS MILLS, JR., of Baltimore, Md., B. E. The Johns Hopkins University, 1952. Mechanical Engineering.
Design of Optimal Heat Exchangers—A Generalized Approach Using Lagrangian Multipliers.
- VIVIAN O'BRIEN, of Baltimore, Md., A. B. Goucher College, 1945; M. A. The Johns Hopkins University, 1950. Aeronautics.
Two-Dimensional Compressible Corner Flows.
- WESLEY GWINN POYNTER, of Hillsboro, Ore., B. S. Ch. E. Oregon State College, 1951. Chemical Engineering.
Reaction Kinetics of a Tubular Reactor under Conditions of Turbulent Flow.
- BURTON FRANKLYN PRICE, of Baltimore, Md., B. E. E. Polytechnic Institute of Brooklyn, 1948. Electrical Engineering.
The Effect of Vacuum Tube Nonlinearities upon the Power Output and Efficiency of a Class C Colpitts Oscillator.
- VISWANATHAN RAJAGOPALAN, of Madras, India, B. E. Madras University, 1949. Sanitary Engineering.
Radioactive Decontamination of Wool by Dry Cleaning Techniques.
- WILLIAM GEORGE ROSE, of Portland, Conn., B. S. M. E. Brown University, 1949. Mechanical Engineering.
A Theoretical Analysis of the Flow in a Curved Space of Revolution and a Comparison with the Experimentally Determined Flow Field.
- SIDNEY LOUIS RUSSAK, of Brooklyn, N. Y., B. S. College of the City of New York, 1951. Civil Engineering.
Eddy Stresses in Large Scale Atmospheric Turbulence.
- CHARLES BESLER SCHARP, of Baltimore, Md., B. E. The Johns Hopkins University, 1948. Mechanical Engineering.
Optimum Design of Liquid-Coupled Indirect-Transfer Heat-Exchanger Systems.
- HASSAN KAMKAR SHAHRUDY, of Tehran, Iran, B. S. Ch. E. State University of Iowa, 1947. Sanitary Engineering.
A Sanitary Code for Iran.
- JAMES FOSTER THOMSON, of Union, S. C., B. S. University of South Carolina, 1950. Sanitary Engineering.
A Vibrating Screen for Solids Removal and Sludge Concentration.
- HARRY CLARKE WAYS, JR., of Hyattsville, Md., B. C. E. Villanova College, 1949. Sanitary Engineering.
A Study of the McMillan Slow Sand Filters.

DOCTORS OF ENGINEERING

WITH TITLES OF DISSERTATIONS

EDWARD JOHN COOK, of St. Paul, Minn., B.Ch.E. University of Minnesota, 1940; M.Ch.E., 1947. Chemical Engineering.

A Study of the Effect of High Concentrations of Neutral Salts upon the Biological Oxidation Waste Treatment Systems.

RALPH EDWARD FUHRMAN, of Washington, D. C., B.S. University of Kansas, 1930; M.S. in Eng. Harvard University, 1937. Sanitary Engineering.

Upper Potomac River Industrial Wastes Investigation.

WALTON MILTON HANCOCK, of East McKeesport, Pa., B.E. The Johns Hopkins University, 1951; M.S.E., 1952. Industrial Engineering.

The Capabilities of Printing Processes to Produce Uniform Color.

NORRIS JACKSON HUFFINGTON, JR., of Baltimore, Md., B.E. The Johns Hopkins University, 1949; M.S.E., 1951. Mechanical Engineering.

Theoretical Determination of Rigidity Properties of Orthogonally Stiffened Plates.

HOWARD SCHARFMAN, of Baltimore, Md., B.S.E.E. New York University, 1947; M.S.E.E. Northwestern University, 1948. Electrical Engineering.

Electromagnetic Scattering from Objects.

LEROY HARRINGTON SMITH, JR., of Baltimore, Md., B.E. The Johns Hopkins University, 1949; M.S.E., 1951. Mechanical Engineering.

Three-Dimensional Flow in Axial Flow Turbomachinery.

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BACHELORS OF SCIENCE IN BUSINESS

PETER RICHARD ALLWORK, of Greenwich, Conn.

MARK ABRAHAM ARONOFF, of Baltimore, Md.

ROBERT HASKELL BRODER, of West Orange, N. J.

HERBERT BURGUNDER, JR., of Baltimore, Md.

ALEXANDER RANDALL CASSELL, JR., of Baltimore, Md.

JOHN FENZEL, JR., of Hampshire, Ill.

VICTORINO RODRIQUES FLORO, JR., of Manila, Republic of the Phillipines

FRANCIS WARRINGTON GILLET, JR., of Glyndon, Md.

IRVIN WALTER HOYER, of Baltimore, Md.

EMORY ROCHE HULL, of Baltimore, Md.

NORMAN DURLING KENNEY, JR., of Baltimore, Md.

WILLIAM MINIFIE LEVY, of Baltimore, Md.

WALTER LEE MCGINN, of Baltimore, Md.

ROBERT MORRISON MCMATH, of New Rochelle, N. Y.

IRWIN THOMAS MEDINGER, of Baltimore, Md.

ANTHONY THOMAS MIGLIORE, of Baltimore, Md.

ROBERT CLAIBORNE MORRIS, of Memphis, Tennessee

TAFT RENSHAW PHOEBUS, of Baltimore, Md.

JOSEPH ANTHONY PUZZO, of Waterbury, Conn.

HERBERT ALLEN SEIDMAN, of Baltimore, Md.

ALVIN YALE SHAPIRO, of Baltimore, Md.

JEROME HENRY SHAPIRO, of Baltimore, Md.

ALFRED ANTHONY STOECKER, of Baltimore, Md.

ALAN VICTOR STONE, of Woodbine, N. J.

THOMAS EDWIN STONE, of Barrington, R. I.

HARVEY BERTRAM WALPERT, of Baltimore, Md.

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GRADUATING WITH HONORS

IRVIN THOMAS MEDINGER

BACHELORS OF SCIENCE

JANE NINA ALFANO, of York, Pa.	CHESTER LAKE KISER, of Baltimore, Md.
DAVID ARTHUR AMOS, JR., of Baltimore, Md.	CHARLES ARTHUR KLATT, of Baltimore, Md.
CHARLES HENRY AMRHINE, of Baltimore, Md.	WALTER DONZELL KONE, of Baltimore, Md.
RUDOLPH A. BEHOUNEK, of Baltimore, Md.	ELSIE SIMPSON LAMBERT, of Baltimore, Md.
MARGARET ELIZABETH HEMMICK BIEN, of Baltimore, Md.	RAYMOND JOHN LISTON, of Baltimore, Md.
MILDRED VIRGINIA LUMM BROWN, of Linthicum Heights, Md.	EILEEN JOHANNE MCCARTHY, of Middletown, Conn.
JOSEPH ALBERT BUSH, of Baltimore, Md.	JEAN FROTHINGHAM MCDEVITT, of Baltimore, Md.
JOHN JOSEPH CALLAHAN, of Old Forge, Pa.	NORMAN LINDSAY MCNEIL, of Baltimore, Md.
NICHOLAS ANTHONY CANZONA, of Glen Burnie, Md.	WILLIAM JOSHUA MEEKINS, of Garrison, Md.
FREDA LEWIS CREUTZBURG, of Baltimore, Md.	JOSEPHINE DOLORES MERENDINO, of Baltimore, Md.
VIRGINIA PAYNE CROWTHER, of Baltimore, Md.	RUBY CARICO MERRYMAN, of Jarrettsville, Md.
ETTA MARTHA CURRIER, of Baltimore, Md.	MARIE ELIZABETH MITCHELL, of Baltimore, Md.
WILLIAM FRANK DASCH, of Baltimore, Md.	JOHN WESLEY O'BRIEN, of Laurel, Md.
JOHN DONALD DE FRANCESCO, of Washington, D. C.	JANE PEEBLES, of Norfolk, Va.
RUTH A. RACINE DICK, of Wilmington, Del.	BRUCE GABRIEL POLLOCK, of Baltimore, Md.
LOIS DOWELL DORIAN, of Baltimore, Md.	DOROTHY JEAN POWELL, of Pittsburgh, Pa.
FREDRICK EVERHARDT, of Catonsville, Md.	SAMUEL RIGGS, of Bethesda, Md.
HELEN MADELYN FISHER, of Havre de Grace, Md.	MARION SCHWARTZ RODERICK, of Baltimore, Md.
LOUIS FRANK, JR., of Baltimore, Md.	LEONA ANN RUST, of Baltimore, Md.
GEORGE BERNARD GAMMIE, of Baltimore, Md.	MARILYN GARTE SCHER, of Baltimore, Md.
ROSALIE LARKIN GANZHORN, of Baltimore, Md.	DOROTHY ELISE SCHMIDT, of Baltimore, Md.
WILLIAM GEORGE GIESZ, of Tonawanda, N. Y.	JOHN ROBERT SCHULTHEIS, of Baltimore, Md.
WILLIAM MILLINGTON GINDER, of Towson, Md.	MARTIN SCHWARTZ, of Baltimore, Md.
JAMES S. GLICK, of Baltimore, Md.	JACK A. SENDER, of New York, N. Y.
CARITA CAROLYN GREENERT, of Hutchinson, Kan.	ELEANORE LOUISE SHEPPARD, of Aberdeen, Md.
SABRÉ ELIZABETH HARTMAN, of Baltimore, Md.	PATRICIA ANN SHIPLEY, of Baltimore, Md.
EUGENE JOSEPH HENRY, of Baltimore, Md.	DONALD SCATTERGOOD SMITH, of Baltimore, Md.
ERNEST HENRY HINRICHS, JR., of Baltimore, Md.	CHARLES A. SPRENKLE, of York, Pa.
MARY EDNA HOPKINS, of Baltimore, Md.	FREDDA LEIGH STAEHLE, of Pasadena, Md.
GLADYS STEARLEY HOPPMANN, of Baltimore, Md.	WILLIAM BENJAMIN STONESIFER, of Hampstead, Md.
WALTER CLIFTON HOUCK, of Baltimore, Md.	ALAN BURRAGE STOUT, JR., of Baltimore, Md.
CATHERINE WIGLEY HUTCHINS, of Glen Burnie, Md.	WILLIAM ELLSWORTH TARR, of Baltimore, Md.
ROBERT RUSSELL INGRAM, JR., of Atlanta, Ga.	HENRY A. VOITH, of Baltimore, Md.
CHARLES GILBERT JACOBS, of North Bergen, N. J.	KATHERINE SHELLMAN WALSH, of Baltimore, Md.
IDA MAE SHIPE JOHNSON, of Baltimore, Md.	CATHERINE ELIZABETH WARD, of Catonsville, Md.
JAMES WILLIAM JOHNSON, of Baltimore, Md.	BEVERLY ANNE DIETRICH WEBER, of Baltimore, Md.
ELIZABETH LAVERTY KEPHART, of Baltimore, Md.	RUTH BELL BONNERT ZACHARY, of Baltimore, Md.
	WILLIAM W. ZELLER, JR., of Baltimore, Md.

(75)

GRADUATING WITH HONORS

FREDRICK EVERHARDT
MARIE ELIZABETH MITCHELL

LEONA ANN RUST
DONALD SCATTERGOOD SMITH

BACHELOR OF SCIENCE IN AERONAUTICAL ENGINEERING

BURNHAM JOSSELYN, of Kingsville, Md.

(1)

BACHELORS OF SCIENCE IN CHEMICAL ENGINEERING

BERNARD CARTER BOYKIN, of Ruxton, Md.
HERBERT KIRK FALLIN, of Baltimore, Md.

CHARLES NORMAN GOSNELL, of Baltimore, Md.
HARRY EDWARD VELKER, of Baltimore, Md.

(4)

GRADUATING WITH HONORS

HARRY EDWARD VELKER

BACHELORS OF SCIENCE IN CIVIL ENGINEERING

WILLIAM JOSEPH BUSSELLS, of Baltimore, Md.
WILLIAM EDWARD RILEY, of Baltimore, Md.

ITALO EMILIO VALSECCHI, of Baltimore, Md.

(3)

BACHELORS OF SCIENCE IN ELECTRICAL ENGINEERING

WALTER FRANKLYN BRAUN, of Havre de Grace, Md.
WILLIS STEWART DRUMMER, of Baltimore, Md.
JOSEPH KAIN, of Washington, D. C.
JACK RIDER LAMBERT, of Baltimore, Md.
RICHARD GRANT LESSNER, of Baltimore, Md.

ELMER JOHN MANGOLD, of Baltimore, Md.
CLAUDE RYLAND MOORE, JR., of Baltimore, Md.
HENRY MERRICK PRAGEL, of Baltimore, Md.
SIGISMUND STANISLAUS PYZIK, of Baltimore, Md.
LOUIS EUGENE SCHAEFFER, of Baltimore, Md.

(10)

GRADUATING WITH HONORS

WALTER FRANKLYN BRAUN

BACHELORS OF SCIENCE IN INDUSTRIAL ENGINEERING

ARTHUR HAWKSWORTH, of Baltimore, Md.
JOHN ADAM KIRKHAM, III, of Towson, Md.

EUGENE THOMAS LYONS, of Baltimore, Md.
JOHN GRANT MCKITTRICK, of Baltimore, Md.

(4)

BACHELORS OF SCIENCE IN MECHANICAL ENGINEERING

CHARLES WILLIAM ANDRAE, JR., of Baltimore, Md.
WILLIAM PAUL BRAUNS, of Baltimore, Md.
HAROLD RANDOLPH BROOKS, of Baltimore, Md.
ROBERT WILLIAM DOLAN, of Baltimore, Md.
LOUIS GARLAND HARRISON, of Riderwood, Md.

JOHN GORDON SCHRIVER, of Baltimore, Md.
EUGENE SCHWARZER, of Baltimore, Md.
FRED W. VON BEHREN, of Baltimore, Md.
WALTER MARTIN YOUNG, of Baltimore, Md.

(9)

GRADUATING WITH HONORS

WILLIAM PAUL BRAUNS

BACHELORS OF SCIENCE IN NURSING

- JEAN ELIZABETH BEAVEN, of Hillsboro, Md.
MARY JANE BECK, of Fort Campbell, Ky.
RUTH PATRICIA BEECHWOOD BENDER, of Washington, D. C.
MARY KATHRYN BERRY, of Lexington, Ohio
JACQUELINE ANN BOOTHE, of Kirkwood, Mo.
VIJA ILGA BORSTEINS, of Lancaster, Pa.
NANCY BICKELHAUPT BOYKIN, of Lutherville, Md.
MONA ALYSE BRACH, of Brooklyn, N. Y.
MARY LOUISE BRISTER, of Brookhaven, Miss.
BARBARA JANE BROWN, of Arlington, Va.
CAROLYN LOUISE COUSAR, of Bibanga, Belgian Congo
MARY DEE DARBY, of Jackson, Miss.
CAROLYNE KAHLE DAVIS, of Cazenovia, N. Y.
ELSIE ANN DEIBERT, of Edgewater Park, N. J.
MARY ETHEL EDWARDS, of Urbana, Ill.
PATRICIA ANN EIKELBERGER, of Hagerstown, Md.
GRACE MARIE FALLON, of Jackson Heights, N. Y.
BARBARA LEIBY FISCHER, of Reisterstown, Md.
MARY ELEANOR FITZHUGH, of Kensington, Md.
EVELYN MAXINE GARVIN, of Taneytown, Md.
MARTHA ANN HEWITT, of Baltimore, Md.
BARBARA CLAIRE JACKSON, of Lakeland, Fla.
MARIAN CHAPIN JAMESON, of Alexandria, Va.
BARBARA ANN JOHNSON, of Clyde, N. Y.
MARIAN BEATRICE JONES, of Centreville, Md.
JUDITH HAYNES KEMP, of Bethesda, Md.
- ANNE SIM LOGSDON, of Newton, N. H.
DOROTHY MAE LOTT, of Sugar Run, Pa.
WILLAGENE McDANIEL, of The Dalles, Ore.
NANCY EILEEN MEADE, of Gate City, Va.
OLGA AMELIA MELICHAREK, of Brooklyn, N. Y.
KATHERINE JANE RAPP MILLER, of Charlotte, N. C.
DOROTHY LOUISE MINCHEW, of Thomasville, Ga.
MARY ELIZABETH MOSELEY, of Radford, Va.
NANCY LOUBELL NEAL, of Frostburg, Md.
MARY ANNETTE O'Connor, of Waterloo, Iowa
ELIZABETH ALWILDA O'HILL, of Milwaukie, Ore.
MARY SIDWELL POOLE, of Delta, Pa.
JULIA HARRISS RICHARDSON, of Wilmington, N. C.
JEAN MISER SANKEY, of Baltimore, Md.
BARBARA KNOX SCHRADER, of St. Louis, Mo.
KATHERINE MERLE STEPP, of Maryville, Tenn.
EMILY ELIZABETH STOREY, of Pittsburgh, Pa.
NORMA JEAN STREMMEL, of Ontario, Calif.
ELLEN WARFIELD STYLES, of Falls Church, Va.
DOROTHY LYDIA THARP, of Wimberley, Tex.
JANICE CHARLES TICE, of West Palm Beach, Fla.
MARY SUE VAN HOOSE, of Ashland, Ky.
ANNE KECK WHISSEN, of Washington, D. C.
JANE FORBES WILGIS, of Pikesville, Md.
BETTIE GENEVIEVE WINEX, of Selinsgrove, Pa.
NELLE ALLISON WYATT, of Rome, Ga.

(52)

MASTERS OF EDUCATION

- CLARA GRIFFIN BLOUNT, of Baltimore, Md., B. S. Hampton Institute, 1938.
ELIZABETH BODENHEIMER, of Baltimore, Md., A. B. Goucher College, 1951.
CHARLOTTE HENRIETTA DIENER BURKART, of North Wales, Pa., B. S. State Teachers College, Towson, Md., 1947.
ROBERT CURLAND, of Baltimore, Md., B. S. The Johns Hopkins University, 1949.
RICHARD DAVIS DEAN, of Baltimore, Md., B. S. University of Maryland, 1950.
CHARLES FREDERICK ECKES, of Baltimore, Md., B. S. State Teachers College, Towson, Md., 1949.
HELEN JOANN PETERSON FLOYD, of Statesboro, Ga., A. B. Agnes Scott College, 1950.
MIRIAM KOOZER WISEMAN FOORD, of Ruxton, Md., B. S. Indiana State Teachers College, 1936.
- BLANCHE POTTER GEER, of Baltimore, Md., B. A. Mount Holyoke College, 1942.
JEANE DUNN HALL, of Baltimore, Md., B. S. Northeastern State College, 1938.
SHIRLEY THIELL HOEFELICH, of Baltimore, Md., A. B. Goucher College, 1950.
ESTHER JANET HOFFMAN, of Baltimore, Md., B. S. The Johns Hopkins University, 1952.
LAVINIA WEAVER KEAGLE, of Baltimore, Md., B. S. The Johns Hopkins University, 1934.
CHARLES HAVEN KOLB, JR., of Baltimore, Md., B. S. State Teachers College, Towson, Md., 1936.
ROBERT CRAWFORD LLOYD, of Baltimore, Md., B. S. The Johns Hopkins University, 1948.
LOIS COX MARSHALL, of Greenville, N. C., B. S. University of Texas, 1934.

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| VIVIAN SCHWEGLER MCINTOSH, of Lutherville, Md., B. S. State Teachers College, Emporia, Kans., 1934. | HELEN ELIZABETH SHALLCROSS, of Baltimore, Md., A. B. Washington College, 1938. |
| JENNINGS DALLAS MOORE, of Baltimore, Md., B. S. in Sec. Ed., Alderson-Broadbush College, 1949. | ETHEL T. SHEAFFER, of Baltimore, Md., B. S. The Johns Hopkins University, 1952. |
| ALBERT HENRY NAENY, JR., of Baltimore, Md., B. S. State Teachers College, Towson, Md., 1950. | MARY PRESTON SHEFFEY, of Marion, Va., B. S. Longwood College, 1945. |
| MARY LUCILLE NOLAN, of Baltimore, Md., B. S. St. Joseph's College, Emmitsburg, Md., 1948. | IVA CARR SHIPLEY, of Baltimore, Md., B. S. State Teachers College, Towson, Md., 1950. |
| FREDERICK CONRAD OSING, JR., of Catonsville, Md., A. B. Western Maryland College, 1948. | MADELEINE THERESA SKIRVEN, of Baltimore, Md., A. B. Goucher College, 1931. |
| MARGARET KYLE RAMSBURG, of Baltimore, Md., A. B. Western Maryland College, 1928. | JOHN FRANCIS SULLIVAN, of Baltimore, Md., B. S. Springfield College, 1949. |
| ETHEL RIDER, of Baltimore, Md., B. S. Columbia University, 1935. | CHARLES SUSSMAN, of Baltimore, Md. B. S. The Johns Hopkins University, 1947. |
| DANIEL MICHAEL ROCHOWIAK, of Baltimore, Md., B. S. Loyola College, 1950. | JOSEPHINE MARY TRUESCHLER, of Baltimore, Md., B. A. College of Notre Dame of Maryland, 1949. |

(32)

MASTERS OF SCIENCE IN HYGIENE

WITH TITLES OF THESES

- | | |
|---|--|
| JAMES LAWRENCE BARLOW, of Detroit, Mich., B. S. Western Michigan College, 1948. Biochemistry.
The Effect of Divalent Cations on the Interaction of T ₂ Phage and T ₂ Ghosts with Host Cells. | LEONARD PAUL COOK, of Buffalo, N. Y., B. A. University of Buffalo, 1948. Biostatistics.
Home Accidents. |
| ASA GEORGE HUBBARD, JR., of Catonsville, Md., B. S. University of Maryland, 1950. Microbiology.
Incorporation of Radioactive Phosphorus in Influenza Virus. | |

(3)

DOCTORS OF SCIENCE IN HYGIENE

WITH TITLES OF DISSERTATIONS

- | | |
|--|--|
| CHARLES HARRY BARROWS, JR., of Baltimore, Md., B. S. Rutgers University, 1948. Biochemistry.
The Effect of Dietary Protein Preparations on Enzymes and the Physiological State of Rats. | CALVIN ALLEN LANG, of Portland, Oregon, A. B. Princeton University, 1947. Biochemistry.
Studies on the Isolation and Metabolism of Certain Growth Factors Found in Liver. |
| JOHN JERMYN CHRISTIAN, of Washington Grove, Md., A. B. Princeton University, 1939. Parasitology (Vertebrate Ecology).
The Relation of the Adrenal Cortex to Population Size in Rodents. | ISRAEL ROBERT LEHMAN, of Baltimore, Md., A. B. The Johns Hopkins University, 1948. Biochemistry.
Metabolic Studies of <i>Echerichia coli</i> B Infected with T ₂ Bacteriophage—"Ghosts." |
| PETER JOHN GERONE, of Oakfield, N. Y., B. A. University of Buffalo, 1949; M. A., 1951. Microbiology.
Combined Infections with Influenza Virus and Pneumococci in Mice. | AMERICO ALVIN MARUCCI, of Orange, N. J., B. S. Rutgers University, 1944, Sc. M. in Hyg. The Johns Hopkins University, 1951. Microbiology.
A Critical Study of the Use of Radio-Iodinated Antibody as a Tool in Antibody Analyses. |

- ROBERT CHARLES MILLONIG, of Dayton, Ohio, B. S. University of Dayton, 1943; M. A. Miami University, 1948. Microbiology.
Production, Purification, and Characterization of a Proteinase of the Okra Strain of Type B *Clostridium Botulinum*.
- BRUNO PAPIRMEISTER, of Baltimore, Md., B. A. The Johns Hopkins University, 1947. Biochemistry.
The Isolation and Properties of the Forssman Hapten from Erythrocytes of Sheep.
- GERSON LOUIS RAM, of Bloomfield, N. J., B. A. Upsala College, 1941; M. Sc. Rutgers University, 1947. Parasitology.
Studies on Relationships between Specific Protective Factor and Agglutinating Antibodies in the Serum of Chickens Showing Resistance to *Plasmodium Galinaceum* Infection.
- MARTHA ELIZABETH ROGERS, of Phoenix, Arizona, B. S. George Peabody College, 1937; M. A. Columbia University, 1945; M. P. H. The Johns Hopkins University, 1952. Public Health Administration (Mental Hygiene).
The Association of Maternal and Fetal Factors with the Development of Behavior Problems among Elementary School Children.
- MARTIN WARREN SCHEIN, of Baltimore, Md., A. B. University of Iowa, 1949. Parasitology (Vertebrate Ecology).
Group Behavior Patterns in Dairy Cattle and Their Effect on Production.
- RICHARD SUSUMU YAMAMOTO, of Honolulu, Territory of Hawaii, A. B. University of Hawaii, 1946; M. A. George Washington University, 1949. Biochemistry.
The Effect of Stress on the Organ Weights and Enzymes of the Rat.

(12)

MASTERS OF PUBLIC HEALTH

- SEIZABURO ARAI, of Tokyo, Japan, M. B. The Tohoku University, 1944; M. D., 1952.
- JORGE ARESTIVO, of Asuncion, Paraguay, M. D. Faculty of Medical Sciences of the National University, 1943.
- TIMOTHY DANFORTH BAKER, of Baltimore, Md., B. A. The Johns Hopkins University, 1948; M. D. University of Maryland, 1952.
- JAMES ELMER BANTA, U. S. Navy, M. D. Marquette University, 1950.
- BLAIR EVERETT BATSON, of Baltimore, Md., B. A. Vanderbilt University, 1941 M. D., 1944.
- EDWIN AUGUSTUS BECKCOM, JR., U. S. Air Force, D. V. M. Agricultural and Mechanical College of Texas, 1938.
- KATHARINE ROSENBAUM BOUCOT, of Philadelphia, Pa., M. D. Woman's Medical College of Philadelphia, 1942.
- ERWIN HOWARD BRAFF, U. S. Public Health Service, A. B. University of California, 1945; M. D., 1948.
- IK CHIN CHANG, of Seoul, Korea, M. B. Severance Union Medical College (Korea), 1940.
- JOHN CANDLER COBB, of Lutherville, Md., B. S. Harvard University, 1941; M. D., 1948.
- NORMAN IRVING CONDIT, U. S. Air Force, B. A. Tusculum College, 1940; M. D. Yale University, 1943.
- JACK LEWIS CONNELLY, of Rochester, N. Y., A. B. University of Rochester, 1947; M. D., 1951.
- JOHN ALFRED DILLON, JR., U. S. Air Force, B. S. University of Kansas, 1933; M. D., 1935.
- WILLIAM KENNEDY DOUGLAS, U. S. Air Force, B. S. Texas Western College, 1946; M. D. University of Texas, 1948.
- JOHN FRANCIS EGAN, U. S. Navy, B. S. Baldwin Wallace College, 1945; M. D. New York Medical College, 1949.
- MUDHAFFAR ABDUL WAHHAB ELSAMMERAI, of Baghdad, Iraq, M. D. Istanbul University, 1949.
- RAMÓN LUCIO FERNÁNDEZ, of San Salvador, El Salvador, M. D. National University (El Salvador), 1949.
- ALAN FOORD, of Ruxton, Md., B. S. Yale University, 1938; M. D. Columbia University, 1941.
- WARFIELD GARSON, U. S. Public Health Service, A. B. University of California (Los Angeles), 1941; M. D. University of Southern California, 1945.
- JOHN ARMEL GOOGINS, U. S. Public Health Service, B. S. University of Maryland, 1948; M. D., 1950.
- DANIEL CROSBY GREENE, of Pittsfield, Mass., A. B. Harvard University, 1932; M. D. Yale University, 1937.
- GERMAN GUERRA MEJIA, of Santiago, Chile, D. V. M. University of Chile, 1938.
- JAMES BARNES HARTGERING, U. S. Army, A. B. Cornell University, 1941; M. D., 1943.
- SAMUEL BOLAN HATFIELD, of Sydney, Australia, M. B. B. S., Sydney University, 1939; M. C. R. A., 1953.
- KUM HAW, of Pusan, Korea, Bachelor of Kanazawa Pharmacy, Kanazawa Medical College, 1938.
- ALI MOHAMED SAYED ABDEL KAWI, of Cairo, Egypt, M. B. B. Ch. Fouad I University, 1950.

- MUHAMMAD AMAN ULLAH KHAN, of District Multan, Pakistan, M.B. B.S. King Edward Medical College (Pakistan), 1949.
- LOUISE KINCAID, of Gainesville, Fla., B.S. Vanderbilt University, 1936.
- EDWARD HENRY LOSSING, of Ottawa, Canada, M.D., C.M. Queens University, 1930.
- DAVID IGNATIUS MAHONEY, JR., U. S. Air Force, B.S. University of San Francisco, 1943; M.D. Creighton University, 1946.
- CHARLES BENTON MARSHALL, JR., U. S. Air Force, M.D. University of Maryland, 1946.
- MARIA LASTHENIA TELLES DE MIRANDA, of Belem, Para, Brazil, B.S. Skidmore College, 1949.
- NAGALINGAM NAVARATNAM, of Colombo, Ceylon, M.B. B.S. University of Ceylon, 1944.
- ROY MILLS NEUDECKER, of Jackson, Tenn., A.B. University of Tennessee, 1937; M.D., 1940.
- DONALD ROSS NICOL, World Health Organization, Washington, D. C., M.D. University of Toronto, 1935.
- LAWRENCE THOMAS ODLAND, U. S. Air Force, M.D. University of Southern California, 1952.
- EDUARDO PÁEZ-PUMAR, JR., of Caracas, Venezuela, M.D. Central University of Venezuela, 1945.
- KANCHANA PANIKABUTRA, of Bangkok, Thailand, M.B. University of Medical Sciences, 1950.
- MARIAN ELIZABETH PICKENS, of Baltimore, Md., B.S. University of Pennsylvania, 1944.
- ROBERT LEE PRICE, U. S. Public Health Service, M.D. University of Virginia, 1946.
- SUBBARAO VENKATA RAMA RAO, of Bangalore, India, M.B. B.S. Mysore University, 1944; D.P. H. Calcutta University, 1950.
- MARGARET LAWRENCE RATHBUN, of Rochester, N. Y., B.A. University of Rochester, 1939; M.D., 1943.
- DUURT KLAAS RIJKELS, of Amsterdam, The Netherlands, M.D. University of Amsterdam, 1931.
- BERNARD FRANK ROSENBLUM, U. S. Public Health Service, M.B. Chicago Medical School, 1938; M.D., 1939.
- WILLIAM GORDON SANFORD, U. S. Air Force, M.D. University of Maryland, 1948.
- JORGE RENÉ SARMIENTO, of Lima, Peru, B. S. National University of San Marcos, 1934; M.D., 1942.
- AGNES LILLIAN SCALLY, of Baltimore, Md., B.S. George Peabody College, 1953.
- GEORGE SCHOCHET, of Baltimore, Md., Ph.G. University of Maryland, 1929; B.S., 1931; M.D., 1933.
- JOHN HASKEL SCRUGGS, U. S. Public Health Service, D.V.M. Agricultural and Mechanical College of Texas, 1936.
- RAYMOND SMITH, of Baltimore, Md., B.E. The Johns Hopkins University, 1948.
- CHEVIDICHY NELLIAT SOWMINI, of Visakhapatnam, India, M.B. B.S. Madras Medical College, 1946.
- JAMES ROBERT STRAIN, of Baltimore, Md., M.D. Louisiana State University, 1948.
- JAMES HAROLD STUTEVILLE, U. S. Air Force, B.S. Western Kentucky State University, 1946; M.D. University of Louisville, 1951.
- ROLF HERMANN WILHELM ULRICH, of Bremen, Germany, M.D. Göttingen University, 1945; M.P.H. Academy of Public Health (Hamburg), 1950.
- RAMALINGAM VISALAKSHI, of Madras, India, M.B. B.S. Stanley Medical College, 1946; D.M. C. H. Madras University, 1949.
- HOLMAN RUTHERFORD WHERRITT, U. S. Public Health Service, B.S. Tulane University, 1942; M.D. Louisiana State University, 1945.
- JAMES MARSHALL WILLETT, of Elizabethton, Tenn., B.S. Wake Forest College, 1942; M.D. University of Tennessee, 1948.
- MUNEO YOKOGAWA, of Tokyo, Japan, M.D. Taihoku University, 1941; D.M. Sc. Chiba Medical College, 1951.
- ROMEO MORALES ZARCO, of Quezon City, Republic of the Philippines, A. A. Silliman University, 1938; M.D. University of the Philippines, 1943.

DOCTORS OF PUBLIC HEALTH

WITH TITLES OF THESES

FRANCIS EUGENE GARTRELL, of Chattanooga, Tenn., B. S. Mississippi State College, 1933; M. S. Harvard University, 1935; M. P. H. The Johns Hopkins University, 1944. Sanitary Engineering.

A New Technique for Studying Atmospheric Diffusion Patterns of Power Plant Stack Gases.

RALPH SEAL PAFFENBARGER, JR., of Linthicum Heights, Md., A. B. Ohio State University, 1944; B.M. Northwestern University, 1946; M. D., 1947; M. P. H. The Johns Hopkins University, 1952. Epidemiology.

The Spread of Poliomyelitis from Cases to Personal Associates: An Analysis of Contact during Epidemic Periods.

ARTURO CRUZ REYES, of Manila, Republic of the Philippines, M. D. University of the Philippines, 1940; M. P. H. Harvard University, 1948. Public Health Administration.

Curriculum and Methods of Teaching for Graduate Students in Public Health from the Far East.

(3)

DOCTORS OF MEDICINE

RALPH ROBINSON BAKER, of Baltimore, Md., A. B. The Johns Hopkins University, 1950.

ROBERT REED BAUMANN, of Glen Rock, N. J., A. B. The Johns Hopkins University, 1950.

MELLANIE CARROLL BENTON, of Blue Springs, Ala., S. B. University of Alabama, 1949.

JOHN JAMES BIOLETTI, of Atlantic City, N. J., S. B. Davis and Elkins College, 1950.

EUGENE BLANK, of Baltimore Md., A. B. The Johns Hopkins University, 1948.

JAMES RODNEY BRAYSHAW, of Wilmington, Del., A. B. Princeton University, 1950.

JULIAN THOMAS BUXTON, JR., of Sumter, S. C., A. B. Princeton University, 1950.

MERVYN LEE CAREY, of Wilmington, Del., A. B. The Johns Hopkins University, 1950.

JOHN ALEXANDER CAVINS, of Terre Haute, Ind., A. B. Amherst College, 1950.

ALTON BERNARD COBB, of Camden, Miss., A. B. University of Mississippi, 1950.

CHARLES ROBERT COOKE, of Oak Hill, W. Va., A. B. West Virginia University, 1950; B. S., 1952.

PAUL DIDISHEIM, of Baltimore, Md., A. B. Princeton University, 1950.

RICARDA JAHRREISS DIDISHEIM, of Baltimore, Md., A. B. Goucher College, 1950.

DONALD STONE DOCK, of New York, N. Y., A. B. Princeton University, 1950.

ROBERT SMITH DONOHO, of Owings Mills, Md., A. B. Williams College, 1950.

JOHN CHARLES DOWER, of New York, N. Y., A. B. The Johns Hopkins University, 1950.

RAYMOND THOMAS DOYLE, of Pikesville, Md., A. B. The Johns Hopkins University, 1950.

HENRI LOUIS ENFROY, of Baltimore, Md., A. B. Oberlin College, 1950.

THEODORE NEWSON FINLEY, of Seattle, Wash., S. B. University of Washington, 1950.

GEORGE GROSS FINNEY, JR., of Ecclestone, Md., A. B. Princeton University, 1950.

JOHN MORRIS FLEXNER, of Louisville, Ky., A. B. Yale University, 1950.

WALDO EMERSON FLOYD, JR., of Statesboro, Ga., A. B. Emory University, 1950.

WALTER LAWRENCE FLOYD, of Auburn, Ala., S. B. Alabama Polytechnic Institute, 1949.

BRYAN WILLIAM FORISTER, JR., of Wimberley, Tex., A. B. Rice Institute, 1950.

HERBERT LEONARD FRED, of Waco, Tex., A. B. Rice Institute, 1950.

LEON GOLDMAN, of Forest Hills, N. Y., A. B. Princeton University, 1950.

PETER JOHN GOMATOS, of Cambridge, Mass., S. B. Massachusetts Institute of Technology, 1950.

NELSON GATES GOODMAN, of Baltimore, Md., A. B. The Johns Hopkins University, 1950.

GEORGE WHITTINGTON GORHAM, of New York, N. Y., A. B. Yale University, 1950.

DAVID CARL GUSTAFSON, of Silverhill, Ala., A. B. Howard College, 1951.

ROBERT CHESTER HAYS, of York, Pa., A. B. The Johns Hopkins University, 1950.

HERBERT THOMAS HESKETH, of Grand Forks, N. Dak., A. B. Harvard University, 1950.

- RICHARD WILLIS HIBNER, of Fresno, Calif., A.B. Fresno State College, 1950.
- SHAUN PURDY HOLMAN, of San Francisco, Calif., A.B. Stanford University, 1950.
- JOSEPH HENRY HOOPER, JR., of Ruxton, Md., A.B. Princeton University, 1950.
- WILLIAM JOHN HOSTNIK, of Charleroi, Pa., A.B. The Johns Hopkins University, 1950.
- EDGAR EUGENE HURST, JR., of Plainfield, Ind., A.B. De Pauw University, 1950.
- MELVERN ELLIS LAIDLAW, JR., of Waitsburg, Wash., A.B. Whitman College, 1950.
- FRANK LEAKE, of Sandusky, Ohio, A.B. The Johns Hopkins University, 1950.
- HERBERT JEROME LEVIN, of Newton Centre, Mass., A.B. Harvard University, 1950.
- ROBERT LEIF LILLO, of Moorhead, Minn., A.B. Concordia College, 1950.
- GERALD MAURICE LITTLE, of Jackson, Miss., S.B. Mississippi College, 1948.
- MASON FAULCONER LORD, of Baltimore, Md., A.B. Princeton University, 1950.
- FLOYD BEACHLEY MAIN, of Middletown, Md., A.B. Princeton University, 1950.
- WILLIAM WATKINS MARTIN, JR., of Richmond, Va., S.B. Hampden-Sydney College, 1950.
- FREDERICK WILLIAM MARX, JR., of Holyoke, Mass., A.B. Harvard University, 1950.
- ROBERT HUTCHESON MAUCK, of Richmond, Va., A.B. Washington and Lee University, 1950.
- MARTHA JANE MCANULTY, of Andalusia, Ala., S.B. University of Alabama, 1950.
- TEDDY MANFORD MCGEE, of Mount Clemens, Mich., A.B. Hope College, 1950.
- ROBERT STEWART MCGRAW, of Grosse Point, Mich., A.B. Yale University, 1950.
- WILLIAM HENRY MILLER, of Baltimore, Md., A.B. Haverford College, 1949.
- WILLIAM CHALMERS MONTGOMERY, of Detroit, Mich., A.B. The Johns Hopkins University, 1950.
- HENRIETTA MORITZ, of Michigan City, Ind., A.B. Wheaton College, 1947; A.M. Radcliffe College, 1949.
- KENNETH MILES MOSER, of Baltimore, Md., A.B. Haverford College, 1950.
- HELEN JOHNS OSSOFSKY, of Drexel Hill, Pa., A.B. Mt. Holyoke College, 1943.
- MARTIN PALMER, of Tallahassee, Fla., S.B. Florida State University, 1949.
- JAMES MARTIN PHYTHYON, of Sharpsville, Pa., S.B. Allegheny College, 1949.
- EDGAR O'CONNOR RAND, of Atlanta, Ga., B. Aero. E. Georgia Institute of Technology, 1947.
- CHARLES CAMERON RICHARDS, of Towson, Md., A.B. The Johns Hopkins University, 1950.
- SIDNEY L. SALTZSTEIN, of Milwaukee, Wis., S.B. Yale University, 1950.
- JAMES FRANK SCHAUBLE, of Erie, Pa., A.B. The Johns Hopkins University, 1950.
- STANLEY LEONARD SCHRIER, of Denver, Col., A.B. University of Colorado, 1949.
- CHARLES KENDALL SERGEANT, of Corpus Christi, Tex., A.B. The Johns Hopkins University, 1949.
- EZRA SASSON SHAYA, of Baghdad, Iraq, A.B. Hanover College, 1950.
- JOHN OTIS SIMENSTAD, of Osceola, Wis., A.B. Carleton College, 1950.
- JOHN CLAIR SMITH, II, of Baltimore, Md., S.B. University of Oklahoma, 1950.
- WILLIAM CORWIN SMITH, of Selma, Ala., S.B. University of Alabama, 1950.
- JOHN NEWELL STEWARD, of Los Angeles, Calif., A.B. University of Southern California, 1948.
- MALCOLM STOLER, of Baltimore, Md., S.B. Franklin and Marshall College, 1950.
- BRUCE YALE TAPPER, of Paterson, N. J., A.B. Lehigh University, 1950.
- JAMES WERTS THORPEN, of Cody, Wyo., A.B. Dartmouth College, 1951.
- JEFFERSON DAVIS UPSHAW, JR., of Louise, Miss., S.B. University of Alabama, 1950.
- THOMAS GILMAN VANDIVIER, of Franklin, Ind., A.B. Franklin College, 1950.
- ROSCOE CLAYTON WEBB, JR., of Minneapolis, Minn., S.B. Yale University, 1950.
- PAUL THORNTON WELCH, of Middletown, N. Y., A.B. Bowdoin College, 1950.
- ROBERT ENGLE ZADEK, of Bronxville, N. Y., A.B. The Johns Hopkins University, 1950.
- JOYCE ARLENE ZIEGLER, of Limerick, Pa., S.B. Dickinson College, 1950.

MASTERS OF ARTS

IN THE SCHOOL OF ADVANCED INTERNATIONAL STUDIES

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| RAJAI ABOU-KHADRA, of Gaza, Egypt, B. A. Swarthmore College, 1953. | LEONARD CLEMENT HOAR, JR., of Fresno, Calif., A. B. Stanford University, 1949. |
| CARL ROBERT BIEDERMANN, of Chicago, Ill., A. B. Oberlin College, 1952. | SAMUEL WINFIELD LEWIS, JR., of Houston, Tex., B. A. Yale University, 1952. |
| RICHARD LUCIEN BREault, of Lewiston, Me., B. A. Bates College, 1953. | RICHARD GRAHAM LONG, of Golf, Ill., A. B. Princeton University, 1949. |
| TOBY EMANUEL GODFREY BRUNNER, of Washington, D. C., A. B. Harvard College, 1950. | EDWARD EMMANUEL MALEFAKIS, of Springfield, Mass., B. A. Bates College, 1953. |
| MARY LOU CARMER, of Summit, N. J., A. B. The College of Wooster, 1953. | DAVID GENE REESE, of Dallas, Tex., B. A. Southern Methodist University, 1950. |
| DAVID GIBBONS CONNOR, of Wellesley, Mass., B. S. in Foreign Service, Georgetown School of Foreign Service, 1952. | IRWIN A. RUBENSTEIN, of Miami, Fla., B. S. Rutgers University, 1950. |
| DONALD CHARLES CURRY, of Utica, N. Y., B. A. Hamilton College, 1952. | JOAN ADA ROTHERAM, of McKeesport, Pa., A. B. Mount Holyoke College, 1952. |
| HERBERT CLARKSON FREEMAN, of Highland Park, N. J., B. A. Rutgers University, 1951. | EARL LINDBERGH ROTHERMEL, of West Lawn, Pa., A. B. Syracuse University, 1951. |
| NOEL ROD GILLESPIE, of Portland, Ore., B. A. Reed College, 1952. | JACK STEINGER, of Brooklyn, N. Y., B. A. College of William and Mary, 1953. |
| ROSS MCKAY HARDTER, of Syracuse, N. Y., B. S. Le Moyne College, 1952. | RICHARD NORMAN TILLSON, of Wellesley Hills, Mass., A. B. Dartmouth College, 1950. |
| ROBERT COLVIN HERBER, of Lebanon, Pa., B. A. Ursinus College, 1951. | RUSSELL D. L. WIRTH, JR., of Milwaukee, Wis., B. A. Yale University, 1951. |

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DOCTORS OF PHILOSOPHY

IN THE SCHOOL OF ADVANCED INTERNATIONAL STUDIES

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|---|---|
| ELIE ADIB SALEM, of Bturrat El-Koura, Lebanon, B. A. American University of Beirut, 1950; M. A. University of Cincinnati, 1952. | PANAYIOTIS J. VATIKIOTIS, of Haifa, Israel, B. A. The American University at Cairo, 1948; M. A. Louisiana State University, 1951. |
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MASTERS OF ARTS

WITH TITLES OF ESSAYS

- JOSEPH THOMAS ALLEN, JR., of Los Angeles, Calif., B. S. University of Alabama, 1947; B. A., 1948. Geology.
- ALLAN FRANK ANTISDEL, of Baltimore, Md., B. S. University of Wisconsin, 1938; Ph. M., 1941. Writing.
The Poetry of George Santayana and His Poetic Theory in "The Elements of Poetry."
- DANIEL E. APPLEMAN, of Santa Monica, Calif., B. S. California Institute of Technology, 1952. Geology.
- MARY ASKEW BACKER, of Baltimore, Md., B. A. University of Cincinnati, 1918. History.
The Attitude of the Baltimore Newspapers toward Labor in 1886.
- HARRY MCFARLAND BRACKEN, of Yonkers, N. Y., B. A. Trinity College, Hartford, Conn., 1949. Philosophy.
- WILLIAM BLAKE BRADY, of Canning, N. S., Canada, B. S. St. Francis Xavier University, 1951. Geology.
- HELEN MARIE PICEK BUES, of Baltimore, Md., B. S. The Johns Hopkins University, 1942. Writing.
Expressionism and Karel Čapek.
- RICHARD GORDON CANHAM, of Arlington, Va., B. S. College of William and Mary, 1950. Chemistry.
- PHILIP WHEELER CHOQUETTE, of Hamilton, N. Y., B. Sc. Allegheny College, 1952. Geology.
- RICHARD HALLOWELL CLEM, of Baltimore, Md., B. S. Temple University, 1950. Geology.
- MAX BYRON CRUTE, of Baltimore, Md., B. S. Lynchburg College, 1949. Chemistry.
- RALPH MACGILL DEAL, of Charlotte, N. C., B. A. Oberlin College, 1953. Chemistry.
- ROBERT H. DETTRE, of Willow Grove, Pa., B. S. Lafayette College, 1952. Chemistry.
- DOROTHY A. DUBEL, of Baltimore, Md., B. S. The Johns Hopkins University, 1941. Writing.
The Child in the Broadway Play (1928-1953).
- LUCILLE MILLER DUVALL, of Baltimore, Md., B. S. The Johns Hopkins University, 1949. Writing.
The Boyhood of David Copperfield.
- IRENE COLBERT EDMONDS, of Baltimore, Md., A. B. Syracuse University, 1928. Writing.
The Development of Negro Characterization in Modern American Drama.
- ALAN NEIL EPSTEIN, of Palisades Park, N. J. Psychology.
The Control of Salt Preference in the Adrenalectomized Rat.
- CHESTYN EVERETT, of Washington, D. C., A. B. Howard University, 1949. Art.
The Romantic Pathos of Eugene Delacroix.
- ENRICO THOMAS FEDERIGHI, of Yellow Springs, Ohio, A. B. Antioch College, 1950. Mathematics.
- BRUCE IAN FINSON, of Boonton, N. J., B. A. Cornell University, 1953. Writing.
Façades for an Hourglass.
- ROLAND EDWARD FLEISCHER, of Phoenix, Md., A. B. Western Maryland College, 1952. Art.
The Development of Romantic-Realist Landscape Painting.
- MILDRED ALBERT GREENFIELD, of Baltimore, Md., B. S. The Johns Hopkins University, 1948. Writing.
Early History of the Theatre in Baltimore.
- HENRY BAXTER HARLAN, of Churchville, Md., A. B. Hamilton College, 1953. Romance Languages.
- JOHN EDMOND HARVEY, of New York, N. Y., A. B. The Johns Hopkins University, 1953. Romance Languages.
- DAVID ROSWELL HAUSER, of Detroit, Mich., B. A. Grinnell College, 1952. English.
- MURRAY CLARK HAVENS, of Tuscaloosa, Ala., B. A. University of Alabama, 1953. Political Science.
Southern Congressmen and Foreign Policy.
- CHARLES A. PORTER HOPKINS, of Baltimore, Md., A. B. The Johns Hopkins University, 1953. Writing.
Thirty Poems.
- ALICE HARWOOD HOUSTLE, of Baltimore, Md., A. B. College of Notre Dame of Maryland, 1933. Writing.
Producing Strindberg for a Modern Audience.
- RITA C. HUBBARD, of Norfolk, Va., B. A. College of Notre Dame of Maryland, 1950. Writing.
The Moral World of William Faulkner.
- EDWARD GREENE HUEY, of Baltimore, Md., A. B. The Johns Hopkins University, 1922; LL. B. University of Maryland, 1927. Education.
- MARVIN KAHN, of Baltimore, Md. Biological Sciences.
Alcohol Preference in Rats.
- BLAIR KINSMAN, of Riva, Md., S. B. University of Chicago, 1938. Oceanography.
- JOHN EDWARD KOONTZ, of Baltimore, Md., B. S. The Johns Hopkins University, 1948. Education.
- MARTHA RUTH LEINBACH, of Winston-Salem, N. C., B. S. The American University, 1951. Education.

- MILLARD GRANT LES CALLETTE, of Vienna, Md., A. B. Western Maryland College, 1952. History.
A Study of the Recruitment of the Union Army in the State of Maryland, 1861-1865.
- WILLIAM JAMES WINSHIP LEWIS, of Baltimore, Md., B. S. The Johns Hopkins University, 1947. Writing.
The Importance of Speech Patterns in Singing, Especially Choral Singing.
- JACQUELYN AMOS LOVELL, of Gastonia, N. C., B. A. Winthrop College, 1952. Education.
The Inheritance of Personality Traits.
- HAROLD EDWARD LUSHER, of Baltimore, Md., B. A. Bowdoin College, 1950. German.
A Novelist and His Politics: Theodor Fontane's Relation to Prussian Politics in the Latter Half of the Nineteenth Century.
- WILLIAM CHARLES McMULLIN, of Pittsburgh, Pa., A. B. The Johns Hopkins University, 1953. Romance Languages.
- WILLIAM ROBERT MOBLEY, of Wheeling, W. Va., B. A. West Liberty State College, 1951. Writing.
The Genesis of a Short Story.
- HOUSHANG NASRIN MONFARED, of Tehran, Iran, A. B. The Johns Hopkins University, 1952. Biological Sciences.
Histogenesis of the Red and White Musculature in the Chick.
- BRENDAN PETER O HEHIR, of Baltimore, Md., B. S. Loyola College, 1953. Writing.
Gael and Gall—Four Stories.
- HELEN MARGARET ONDIK, of New York, N. Y., A. B. Hunter College, 1952. Chemistry.
- ROBERT EVERETT ALLEN PALMER, II, of Boise, Idaho, A. B. The Johns Hopkins University, 1953. Classics.
- JOSEPH SAMUEL ROSENSHEIN, of Hartford, Conn., B. A. University of Connecticut, 1952. Geology.
- JOHN FRANCIS RUSSELL, of Brookville, Ind., B. A. De Pauw University, 1951; M. A. Indiana University, 1952. English.
- BARBARA LOUISE SAMSON, of Baltimore, Md., B. A. College of Notre Dame of Maryland, 1952. Writing.
Poems.
- EDWARD NORMAN SCHUSTER, of Baltimore, Md., A. B. The Johns Hopkins University, 1952. Writing.
The Stream and Other Stories.
- EDWIN HOWARD SEEGER, of Baltimore, Md., A. B. The Johns Hopkins University, 1951. Writing.
The Taming and Other Stories.
- EUGENE A. SEKULOW, of Baltimore, Md. Political Science.
Priority for Europe: Policy and Legislation of the Economic Cooperation Act of 1948.
- JACK PAYNE STEPHENS, of Baltimore, Md., A. B. George Washington University, 1949. Art.
- MARK EMMET STERN, of Brooklyn, N. Y., B. A. New York University, 1952. Mathematics.
- VARANASI PARVATI SUBRAHMANYAM, of Waltair, South India, B. S. Andhra University, 1946; M. S., 1947. Climatology.
- MARTHA SPALDING LONG SZEKELY, of Baltimore, Md., B. S. The Johns Hopkins University, 1949. Writing.
Maud Bodkin: The Primordial in the Vision of the Literary Artist.
- DANIEL STANLEY TAMKUS, of Aberdeen, Md., A. B. The Johns Hopkins University, 1953. Writing.
Blue Spears.
- KLAUS HANS TIEDJE, of Stuttgart-Degerloch, Germany, Certif. de L. en D., University of Paris, 1949. Political Economy.
Monetary Policy in Sweden and Switzerland, 1945-1950: A Study of Contrasts.
- RICHARD CARL TIMME, of Orange, Calif., A. B. University of California, 1950. Oceanography.
- MILTON CHARLES VANIK, of Baltimore, Md. Chemistry.
- GEORGE HAMILTON WARNER, of Baltimore, Md., B. S. in Business, The Johns Hopkins University, 1952. Business and Industrial Management.
Depreciation on a Current Basis.
- JOHN ELLINGTON WHITE, JR., of Staunton, Va., B. A. Kenyon College, 1950. Writing.
Welcome the Dark Lady, and Other Stories.

DOCTORS OF PHILOSOPHY

WITH TITLES OF DISSERTATIONS

- STEVEN ABASHIAN, of Binghamton, N. Y., B. S. Rensselaer Polytechnic Institute, 1950; M. A. The Johns Hopkins University, 1952. Chemistry.
Kinetics of Acid Cleavage of Alkyl Substituted Diphenyl Mercury Compounds.
- JAMES EARL APPLGATE, of Cincinnati, Ohio, A. B. The Johns Hopkins University, 1943. English.
Classical Allusions in Prose Work of Robert Greene.
- NORMAN WILLIS ATWATER, of Paterson, N. J., B. S. Rensselaer Polytechnic Institute, 1949; M. A. The Johns Hopkins University, 1950. Chemistry.
Studies on the Structure of B-Caryophyllene.
- HARLEY BARNES, of Washington, D. C., B. S. Wheaton College, 1937; M. S. Northwestern University, 1939. Geology.
Stratigraphy and Structure of the Cretaceous Rocks on the Northern Flank of the San Juan Basin, Colorado and New Mexico.
- DUANE LOWELL BARNEY, of Topeka, Kans., B. S. Kansas State College, 1950; M. A. The Johns Hopkins University, 1951. Chemistry.
Ion Exchange Purification of Tetra- and Trimetaphosphate.
- JOSEPH M. BAUMGARTEN, of Brooklyn, N. Y., A. B. Brooklyn College, 1950. Oriental Seminary.
The Covenant Seet and the Essenes.
- CHARLES LEROY BECKEL, of Seranton, Pa., B. S. University of Seranton, 1948. Physics.
An Improved Vibrational Potential for Diatomic Molecules.
- PETER DOCK BRICKER, III, of Haddonfield, N. J., A. B. Bucknell University, 1950; M. A. The Johns Hopkins University, 1952. Psychology.
The Identification of Redundant Stimulus Patterns.
- RICHARD E. BRUMBERG, of Miami, Fla., Ph. B. University of Chicago, 1948; A. M. University of Illinois, 1951. Political Economy.
Utility Analysis and Aggregate Consumption Functions: An Empirical Test and Its Meaning.
- FRANCIS THOMAS BYRNE, of Baltimore, Md., A. B. The Johns Hopkins University, 1947. Physics.
An Investigation of the Intensities of Bands of He₂ and Lines of HeI in the Afterglow of A Spark Discharge through Pure Helium.
- MICHAEL RICHARD CAMPO, of Hartford, Conn., B. A. Trinity College, 1948; M. A. The Johns Hopkins University, 1953. Romance Languages.
The Influence of Luigi Pirandello on the Italian Dramatic Literature.
- VIRGIL R. CARLSON, of Stockton, Calif., A. B. University of California, 1950; M. A. The Johns Hopkins University, 1952. Psychology.
Individual Differences in the Recall of Word Association Test Words.
- WILLIAM CHESTER DAVIS, of Manchester, N. H., B. S. Tufts College, 1949. Physics.
Short Time Phenomena in Pulsed Discharges.
- GEORGE HUTCHESON DENNY, JR., of Westfield, N. J., B. S. Washington and Lee University, 1950; M. A. The Johns Hopkins University, 1951. Chemistry.
Studies in the Tetronic Acid Series.
- DARSHAN SINGH DOSANJH, of East Punjab, India, B. S. Punjab University, 1944; M. S., 1945; M. S. E. University of Michigan, 1948. Aeronautics.
I. Use of a Hot Wire Anemometer in Shock Tube Investigations.
II. The Interaction of Travelling Shock Waves with Grids.
- CRAIG LANIER DOZIER, of Orlando, Fla., B. A. University of Wisconsin, 1947; M. A. University of Maryland, 1951. Geography.
Northern Parana, Brazil: Settlement and Development of a Recent Frontier Zone.
- GROSE EVANS, of Washington, D. C., B. F. A. Ohio State University, 1940; M. A., 1941. Art.
Benjamin West's Development and the Sources of his Style.
- ALBERT L. FISHER, of Salt Lake City, Utah, B. S. University of Utah, 1951; M. A. The Johns Hopkins University, 1952. Geography.
Surinam's Development Possibilities: A Geographical Study.
- RICHARD FITZHUGH, of Baltimore, Md., B. A. University of Colorado, 1948. Biophysics.
The Effects of Azide and Electrical Polarization on Refractory Period in Frog Nerve.
- HARRY GORDON FRANKFURT, of Baltimore, Md., A. B. The Johns Hopkins University, 1949; M. A., 1953. Philosophy.
The Essential Objectivity of What is Known.
- HAROLD ARTHUR GERSCH, of Atlanta, Ga., B. S. Georgia Institute of Technology, 1948. Physics.
On the Condensation of an Imperfect Gas.
- GILBERT FRANK GILCHRIST, of Charleston, S. C., B. A. University of the South, 1949; M. A. The Johns Hopkins University, 1953. Political Science.
The Political System of James Harrington: A Study in Seventeenth Century Republican Thought.

- ROBERT FRANCIS GLECKNER, of Baltimore, Md., B. A. Williams College, 1948. English.
William Blake: The Piper and the Bard.
- NORMAN GOLB, of Chicago, Ill., A. B. Roosevelt College, 1948; B. H. L. College of Jewish Studies, 1948. Oriental Seminary.
The Cairo Damascus Covenant and Karaite Literature.
- WALTER THOMAS GOUGH, C. S. P., of Baltimore, Md., M. A. Catholic University, 1944. Political Science.
The Legal Theory of Justice Benjamin Cardozo.
- CASIMER THADDEUS GRABOWSKI, of Cleveland, Ohio, B. S. Adelbert College, 1950. Biology.
The Effects of the Excision of Hensen's Node on the Early Development of the Chick Embryo.
- PAUL GREENGARD, of Forest Hills, N. Y., B. A. Hamilton College, 1948. Biophysics.
Some Relationships between Action Potential, Oxygen Consumption and Coenzyme Content in Degenerating Peripheral Axons.
- WILLIAM FREDERICK HALL, of Liverpool, England, A. B. Cambridge University, 1949. English.
Society and the Individual in the English Fiction of Henry James, 1885-1901.
- RITA MAY HALSEY, of Southampton, N. Y., B. A. William Smith College, 1947; M. A. The Johns Hopkins University, 1950. Psychology.
A Comparison of Three Methods for Color Scaling.
- WARREN W. HASSLER, JR., of Baltimore, Md., A. B. The Johns Hopkins University, 1950; M. A. University of Pennsylvania, 1951. History.
George B. McClellan in the Civil War: A Revision.
- HUGH DODGE HAWKINS, of El Reno, Okla., A. B. DePauw University, 1950. History.
The Birth of a University: A History of the Johns Hopkins University from the Death of the Founder to the end of the First Year of Academic Work, 1873-1877.
- SIDNEY OSCAR HILLS, of Baltimore, Md., B. A. Northwestern University, 1941; B. D. McCormick Theological Seminary, 1948. Oriental Seminary.
A Semantic and Conceptual Study of the Root *KPR* in the Hebrew Old Testament with Special Reference to the Accadian *Kuppuru*.
- WILLIAM PAUL HURLBUT, of North Adams, Mass., B. S. Massachusetts Institute of Technology, 1949. Biophysics.
The Effects of Azide on the Sodium and Potassium Contents of Stimulated and Resting Frog Sciatic Nerves.
- PHILIP ATHERTON KNACHEL, of Indianapolis, Ind., B. S. Northwestern University, 1948; M. A. The Johns Hopkins University, 1952. History.
The Conquest and Pacification of Poitou.
- HENRY JOHN KOSTKOWSKI, of Baltimore Md. Physics.
Line Half-Widths and Intensities from the Infrared Transmission of Thermally Excited CO₂.
- EUGENE CLARK LAVIER, of Bethesda, Ohio. Physics.
Angular Correlations in Beryllium Eight.
- KENNETH HARRY LONDON, of Toronto, Canada, B. A. Queens University, 1950. English.
The Early Novels of D. H. Lawrence.
- MINER BARTON LONG, of Baltimore, Md., A. B. Oberlin College, 1948. Geology.
Origin of the Conococheague Limestone.
- ALBERT WILLIAM LUTZ, of Baltimore, Md., A. B. The Johns Hopkins University, 1949; M. A., 1951. Chemistry.
On the Nature of Clovene and Related Compounds.
- PARSHOTAM LAL MEHRA, of Punjab, India, B. A. Punjab University, 1940; M. A., 1942; M. A. The Johns Hopkins University, 1953. International Relations.
The Younghusband Expedition: An Interpretation.
- GILBERT BERNARD MELESE, of Paris, France, B. S. University of Toulouse, 1946; M. S. National Higher School of Aeronautics, 1949. Aeronautics.
On Axisymmetric Turbulence and Scalar Fields.
- GEORGE STANLEY MELVILLE, JR., of Yonkers, N. Y., A. B. The Johns Hopkins University, 1949; M. A., 1950. Chemistry.
Studies of Synthetic Routes to Auxin b.
- EVA M. MERRETT, of New York, N. Y., A. B. Hunter College, 1949; M. A. The Johns Hopkins University, 1951. German.
Childhood and Youth in Theodor Storm's Works.
- AMOTZ MORAG, of Ramat-Gan, Israel, M. A., Hebrew University, 1952. Political Economy.
Indirect Taxes, Inflation, and Development: A Re-appraisal of Indirect Taxation in Underdeveloped Countries.
- HENRY LEROY PLAINE, of Baltimore, Md., A. B. The Johns Hopkins University, 1950. Biology.
Effects of X-rays, Oxygen, and Chemical Agents on Gene Action: The Production of Erupt Eyes and Melanotic Tumors in *Drosophila melanogaster* Meig.
- SERGIO PEREIRA DA SILVA PORTO, of Estado do Rio, Brazil, B. A. University of Brazil, 1946. Physics.
The Near Infrared Spectrum of Molecular Hydrogen.
- JOHN CALVIN REED, JR., of Washington, D. C. Geology.
The Geology of the Catoctin Formation near Luray, Virginia.
- RICHARD PARRISH RIESZ, of Chatham, N. J., A. B. Drew University, 1949. Physics.
Cataphoresis in Rare Gas Glow Discharges.

- LOUIS D. RUBIN, JR., of Richmond, Va., B. A. University of Richmond, 1946; M. A. The Johns Hopkins University, 1949. Aesthetics of Literature.
The Weather of His Youth—A Study of the Form of Autobiographical Fiction in the Work of Thomas Wolfe.
- LOUIS SHUSTER, of Vancouver, B. C., Canada, A. B. University of British Columbia, 1950. Biology.
Enzymatic Studies on Nucleic Acids and Related Nucleotides.
- WARREN SEYMOUR SILVER, of Takoma Park, Md., B. S. University of Maryland, 1949; M. S., 1950. Biology.
Growth and Enzyme Studies on Nitrate and Nitrate Mutants of *Neurospora crassa*.
- WILLIAM M. SINTON, of Baltimore, Md., A. B. The Johns Hopkins University, 1949. Physics.
Distribution of Temperatures and Spectra of Venus and Other Planets.
- ARNOLD ROBERT SLONIM, of Springfield, Mass., B. S. Tufts College, 1947; M. A. Boston University, 1948. Biology.
The Additive Effects of Inorganic Salts and Alcohols on Contact Chemoreceptors.
- DAVID GILBERT SMITH, of Oklahoma City, Okla., A. B. University of Oklahoma, 1948; M. A., 1950. Political Science.
The Political Theory of V. I. Lenin: Some Fundamental Concepts as the Basis for a Systematic Critique.
- ROBERT WEIR STANLEY, of Fort Payne, Ala., B. S. Alabama Polytechnic Institute, 1948. Physics.
Interferometric Wavelength Measurements in a Hollow Cathode Discharge Tube.
- PHILIP TEITELBAUM, of Baltimore, Md., B. S. College of the City of New York, 1950; M. A. The Johns Hopkins University, 1952. Psychology.
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